Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (amended) A filter-less regulator for use in a fluid flow system that processes low concentration reactive gases, the regulator comprising:

a housing including an inlet, an outlet and a fluid flow path defined between the inlet and outlet by internal surfaces of the housing; and

a pressure regulating section to reduce the pressure of a reactive gas flowing through the regulator between the housing inlet and the housing outlet, the pressure regulating section including a plurality of pressure reducing stages to reduce the pressure of the reactive gas from an inlet pressure to an outlet pressure that is lower than the inlet pressure;

wherein the internal surfaces of the housing are formed of ~~a suitable material~~ stainless steel and the combined area of the internal surfaces is sufficiently sized to facilitate processing of a reactive gas having an inlet concentration no greater than about 10 ppm and flowing at a suitable flow rate into the housing inlet such that, when the regulator is implemented for use in the fluid flow system without prior passivation, an outlet concentration of the reactive gas does not decrease to a value that is less than about 10% of the inlet concentration during an initial one hour period of use of the regulator.

Claim 2 (amended) The regulator of claim 1, wherein the ~~internal surfaces are further formed of a suitable material and the~~ combined area of the internal surfaces is sufficiently sized to facilitate processing of a reactive gas having an inlet concentration no greater than about 10 ppm and flowing at a suitable flow rate into the housing inlet such that, when the regulator is implemented for use in the fluid flow system without prior passivation, the outlet concentration of the

reactive gas does not deviate by more than about 5% of the relative standard deviation.

Claim 3 (amended) A filter-less regulator for use in a fluid flow system that processes low concentration reactive gases, the regulator comprising:

a housing including an inlet, an outlet and a flow path defined between the inlet and the outlet by internal surfaces of the housing, wherein the combined area of the internal surfaces is no greater than about 97 square centimeters, wherein the internal surfaces of the housing are formed of stainless steel; and

a pressure regulating section to reduce the pressure of a reactive gas flowing through the regulator between the housing inlet and the housing outlet, the pressure regulating section having a plurality of pressure reducing stages to reduce the pressure of the reactive gas from an inlet pressure to an outlet pressure that is lower than the inlet pressure.

Claim 4 (original) The regulator of claim 3, wherein the combined area of the internal surfaces is no greater than about 52 square centimeters.

Claims 5-6 (cancelled)

Claim 7 (amended) The regulator of ~~claim 6~~ claim 1, wherein the ~~pressure regulating section further includes~~ plurality of pressure reducing stages comprises a high pressure chamber to receive the reactive gas at the inlet pressure, an intermediate pressure chamber to receive the reactive gas from the high pressure chamber and reduce the pressure of the reactive gas from the inlet pressure to an intermediate pressure, and a low pressure chamber to receive the reactive gas from the intermediate pressure chamber and reduce the reactive gas from the intermediate pressure to the outlet pressure.

Claim 8 (original) The regulator of claim 7, wherein the intermediate pressure chamber includes a movable piston that releasably seals an opening at the interface between the high and intermediate pressure chambers during operation of the regulator to control the flow of the reactive gas into the intermediate chamber.

Claim 9 (original) The regulator of claim 7, wherein the low pressure chamber includes a flexible diaphragm that releasably seals an opening between portions of the low pressure chamber during operation of the regulator to control the flow of the reactive gas through the low pressure chamber to the housing outlet.

Claim 10 (original) The regulator of claim 9, further comprising:

a pressure control member coupled with the diaphragm, the pressure control member being selectively manipulated to control an amount of force applied to the diaphragm so as to control the flow of the reactive gas through the low pressure chamber as well as the pressure level of the reactive gas at the housing outlet.

Claim 11 (original) A fluid flow system including the regulator of claim 3, the system further being devoid of a filter at any location upstream from the regulator.

Claim 12 (amended) A method of processing a low concentration reactive gas in a fluid supply system, the method comprising:

(a) providing a filter-less regulator including a housing with an inlet, an outlet and a flow path defined between the inlet and the outlet by internal surfaces of the housing, and a pressure regulating section, wherein the combined area of the internal surfaces is no greater than about 97 square centimeters;

(b) installing the regulator in-line with a reactive gas supply source in the fluid supply system, the reactive gas supply source comprising a gas cylinder containing the reactive gas; and

(c) flowing the reactive gas through the regulator at a selected flow rate to reduce the pressure of the reactive gas from an inlet pressure to an outlet pressure that is lower than the inlet pressure, wherein the reactive gas is supplied to the housing inlet of the regulator at an inlet concentration of no greater than about 10 ppm.

Claim 13 (original) The method of claim 12, wherein the reactive gas is selected from the group consisting of hydrogen sulfide, sulfur dioxide, carbonyl sulfide, mercaptans, hydrogen chloride, chlorine, boron trichloride, ammonia, amines, amides, nitric oxide, nitrous oxide, nitrogen dioxide, carbon monoxide, carbon dioxide, arsine, volatile organic carbons (VOC's), oxygenates, and combinations thereof.

Claim 14 (original) The method of claim 12, wherein the combined area of the internal surfaces is no greater than about 52 square centimeters.

Claim 15 (original) The method of claim 12, wherein the regulator is provided in-line with the reactive gas supply source without any prior passivation with the reactive gas.

Claim 16 (amended) The method of claim 15, wherein the concentration of reactive gas ~~is~~ supplied to the housing inlet of the regulator ~~at an inlet concentration of no greater than about 10 ppm and a suitable~~ and the selected flow rate are such that an outlet concentration of the reactive gas from the regulator does not decrease to a value of less than about 10% of the inlet

concentration during an initial one hour period in which the reactive gas flows through the regulator.

Claim 17 (amended) The method of claim 15, wherein the concentration of reactive gas ~~is~~ supplied to the housing inlet of the regulator ~~at an inlet concentration of no greater than about 10 ppm and a suitable~~ and the selected flow rate are such that an outlet concentration of the reactive gas from the regulator does not deviate by more than about 5% of the relative standard deviation.

Claim 18 (original) The method of claim 12, wherein a substantial portion of the internal surfaces of the housing are comprised of stainless steel.

Claim 19 (original) The method of claim 12, wherein the pressure regulating section includes a plurality of pressure reducing stages to reduce the pressure of the reactive gas from an inlet pressure to an outlet pressure that is lower than the inlet pressure.

Claim 20 (original) The method of claim 12, wherein the pressure regulating section further includes a high pressure chamber to receive the reactive gas at the inlet pressure, an intermediate pressure chamber to receive the reactive gas from the high pressure chamber and reduce the pressure of the reactive gas from the inlet pressure to an intermediate pressure, and a low pressure chamber to receive the reactive gas from the intermediate pressure chamber and reduce the reactive gas from the intermediate pressure to the outlet pressure.

Claim 21 (original) The method of claim 20, wherein the intermediate pressure chamber includes a movable piston that releasably seals an opening at the interface between the high and intermediate pressure chambers during operation

of the regulator to control the flow of the reactive gas into the intermediate chamber.

Claim 22 (original) The method of claim 20, wherein the low pressure chamber includes a flexible diaphragm that releasably seals an opening between portions of the low pressure chamber during operation of the regulator to control the flow of the reactive gas through the low pressure chamber to the housing outlet.

Claim 23 (original) The method of claim 12, wherein the fluid supply system is devoid of a filter at any location upstream from the regulator.

Claim 24 (amended) A method of processing a low concentration reactive gas in a fluid supply system, the method comprising:

(a) providing a filter-less regulator including a housing with an inlet, an outlet and a flow path defined between the inlet and the outlet by internal surfaces of the housing, and a pressure regulating section, wherein the combined area of the internal surfaces is no greater than about 97 square centimeters;

(b) installing the regulator in-line with a reactive gas supply source in the fluid supply system, wherein the regulator has not been subjected to any prior passivation with the reactive gas prior to installation in-line with the reactive gas supply source; and

(c) flowing the reactive gas at an inlet concentration of no greater than about 10 ppm through the regulator at a selected flow rate to reduce the pressure of the reactive gas from an inlet pressure to an outlet pressure that is lower than the inlet pressure;

wherein the reactive gas emerges from the regulator at an outlet concentration that does not decrease to a value of less than about 10% of the inlet concentration during an initial one hour period in which the reactive gas flows through the regulator.

Claim 25 (original) The method of claim 24, wherein the outlet concentration of the reactive gas does not deviate by more than about 5% of the relative standard deviation during the initial one hour period in which the reactive gas flows through the regulator.

Claim 26 (new) A filter-less regulator for use in a fluid flow system that processes low concentration reactive gases, the regulator comprising:

a housing including an inlet, an outlet and a fluid flow path defined between the inlet and outlet by internal surfaces of the housing, wherein the internal surfaces of the housing are formed of aluminum; and

a pressure regulating section to reduce the pressure of a reactive gas flowing through the regulator between the housing inlet and the housing outlet, the pressure regulating section including a plurality of pressure reducing stages to reduce the pressure of the reactive gas from an inlet pressure to an outlet pressure that is lower than the inlet pressure;

wherein the internal surfaces of the housing are formed of aluminum and the combined area of the internal surfaces is sufficiently sized to facilitate processing of a reactive gas having an inlet concentration no greater than about 10 ppm and flowing at a suitable flow rate into the housing inlet such that, when the regulator is implemented for use in the fluid flow system without prior passivation, an outlet concentration of the reactive gas does not decrease to a value that is less than about 10% of the inlet concentration during an initial one hour period of use of the regulator.

Claim 27 (new) A method of processing a low concentration reactive gas in a fluid supply system, the method comprising:

(a) providing a filter-less regulator including a housing with an inlet, an outlet and a flow path defined between the inlet and the outlet by internal surfaces of the housing, and a pressure regulating section;

(b) installing the regulator in-line with a reactive gas supply source in the fluid supply system, wherein the regulator has not been subjected to any prior passivation with the reactive gas prior to installation in-line with the reactive gas supply source and the reactive gas supply source comprises a gas cylinder containing the reactive gas; and

(c) flowing the reactive gas at an inlet concentration of no greater than about 10 ppm through the regulator at a selected flow rate to reduce the pressure of the reactive gas from an inlet pressure to an outlet pressure that is lower than the inlet pressure;

wherein the reactive gas emerges from the regulator at an outlet concentration that does not decrease to a value of less than about 10% of the inlet concentration during an initial one hour period in which the reactive gas flows through the regulator.